



Science20 Dialogue Forum

EPIDEMIOLOGY OF METABOLIC DISEASES
RISING BURDEN OF NON-COMMUNICABLE DISEASES

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What are Noncommunicable Diseases (NCDs)?

also known as
„chronic diseases“,
sometimes **„lifestyle
diseases“**

medical condition
that is **not infectious**:
not passed from
person to person

usually **long duration**
and **slow progression**

high prevalence and
impact in **low- and
middle-income
countries**



Images: Pixabay.com

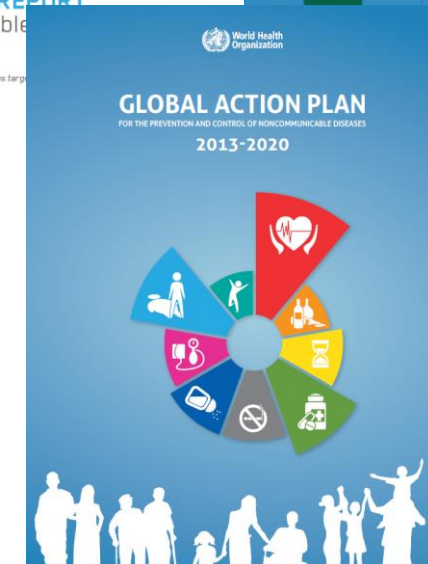
NCDs – Key Facts about Mortality

- NCDs kill 38 million people each year, account for 63% of all deaths worldwide
- Almost three quarters of NCD deaths - 28 million - occur in low- and middle-income countries.
- Sixteen million NCD deaths occur before the age of 70
 - 82% of these "premature" deaths occurred in low- and middle-income countries.
- More than 9 million of all deaths attributed to NCDs occur before the age of 60.

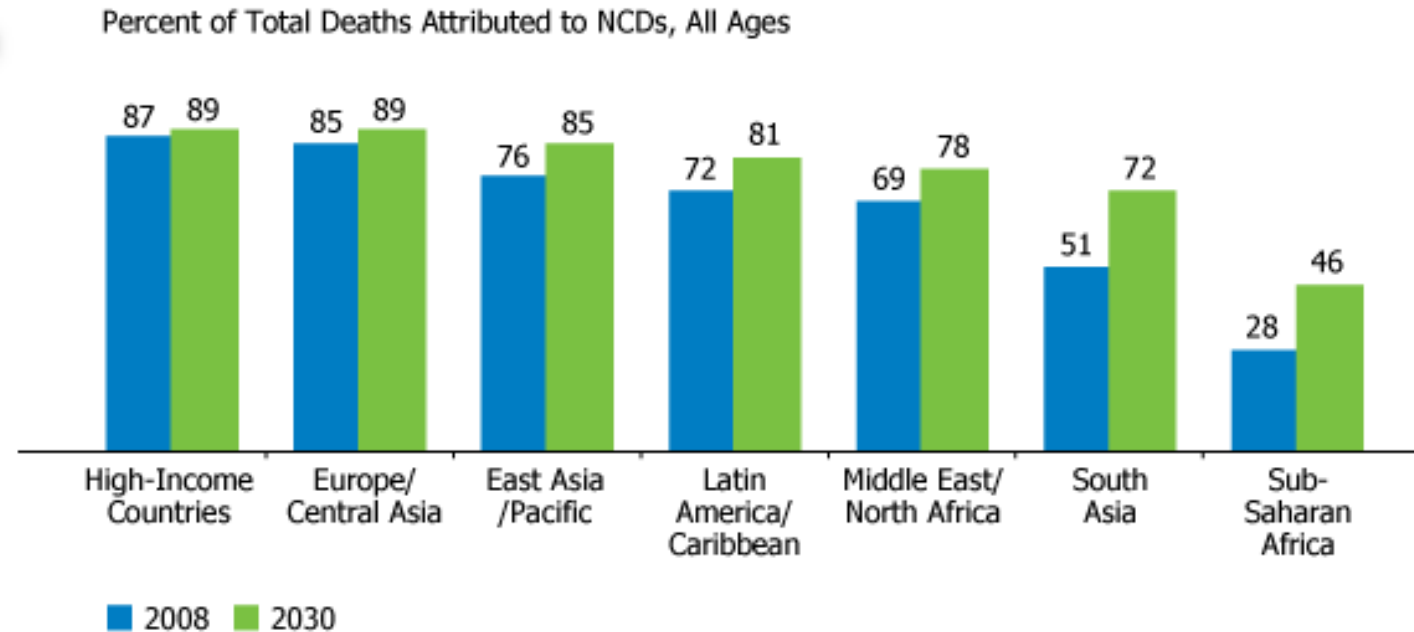


GLOBAL STATUS REPORT
on noncommunicable
2014

*Attaining the nine global noncommunicable diseases targets



NCDs Account for a Growing Share of Total Deaths, Especially in Developing Regions



Source: Irina A. Nikolic, Anderson E. Stanciole, and Mikhail Zaydman, "Chronic Emergency: Why NCDs Matter," *World Bank Health, Nutrition and Population Discussion Paper* (2011).

United Nations General Assembly High-Level Meeting on NCDs, September 2011



"This is the second health issue ever to be addressed at a special meeting of the United Nations General Assembly. We should all work to meet targets to reduce NCDs. WHO's best buys serve as excellent guidance"

Ban Ki-moon • UN Secretary-General • 19 September 2011
• High-level Meeting on NCDs • New-York

NCDs – Nonmodifiable Risk Factors



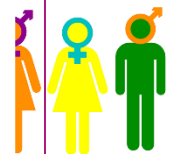
Ageing



**Genetic
predisposition**



Race



Gender

Causation Pathway for NCDs



Impact of Modifiable Risk Factors on Deaths in Major NCDs



Noncommunicable Diseases
World Health Organization



World Health
Organization

	Tobacco Use	Unhealthy diets	Physical Inactivity	Harmful Use of Alcohol
Cardio-vascular				
Diabetes				
Cancer				
Chronic Respiratory				

annual deaths

17.5 mio.

1.5 mio.

8.2 mio.

4 mio.

**attributable
annual deaths**

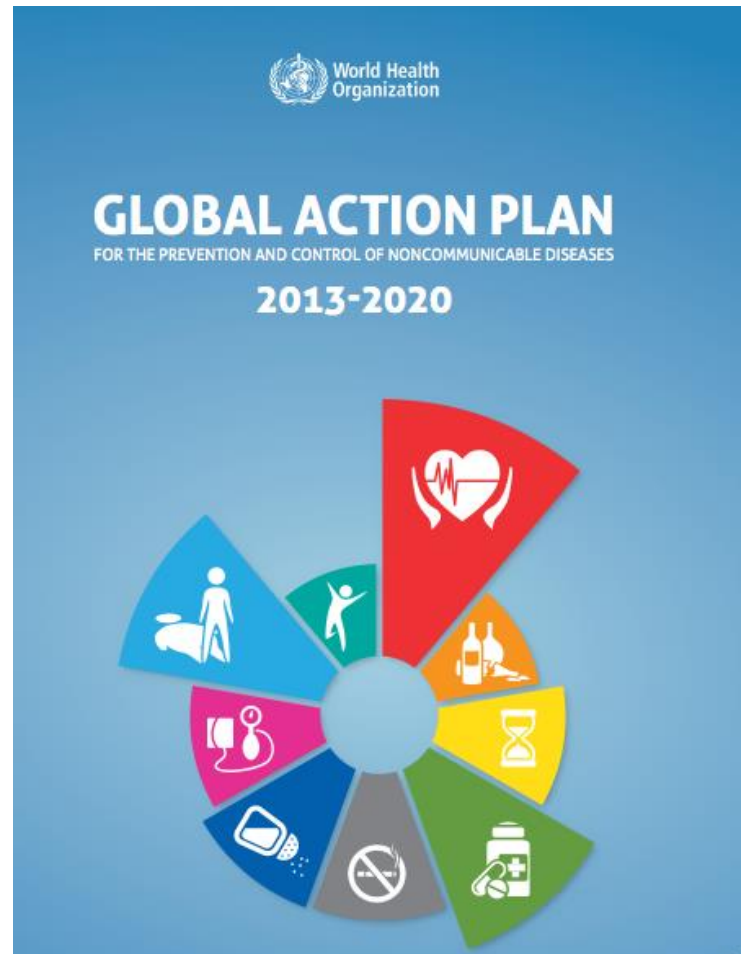
**6
mio.**

**1.7
mio.**

**3.2
mio.**

**3.3
mio.**

WHO Global Action Plan for Prevention and Control of NCD 2013-2020 – 9 Voluntary Targets to be Attained by 2025



A **25%** relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.



At least **10%** relative reduction in the harmful use of alcohol, as appropriate, within the national context.



A **10%** relative reduction in prevalence of insufficient physical activity.



A **30%** relative reduction in mean population intake of salt/sodium.



A **30%** relative reduction in prevalence of current tobacco use in persons aged 15+ years.



A **25%** relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances.



Halt the rise in diabetes and obesity.



At least **50%** of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.



An **80%** availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities.

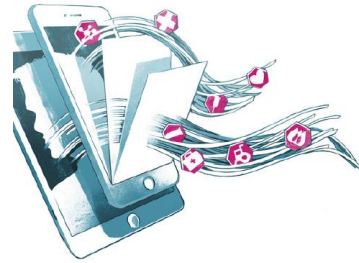
NCDs in the 2030 Agenda for Sustainable Development



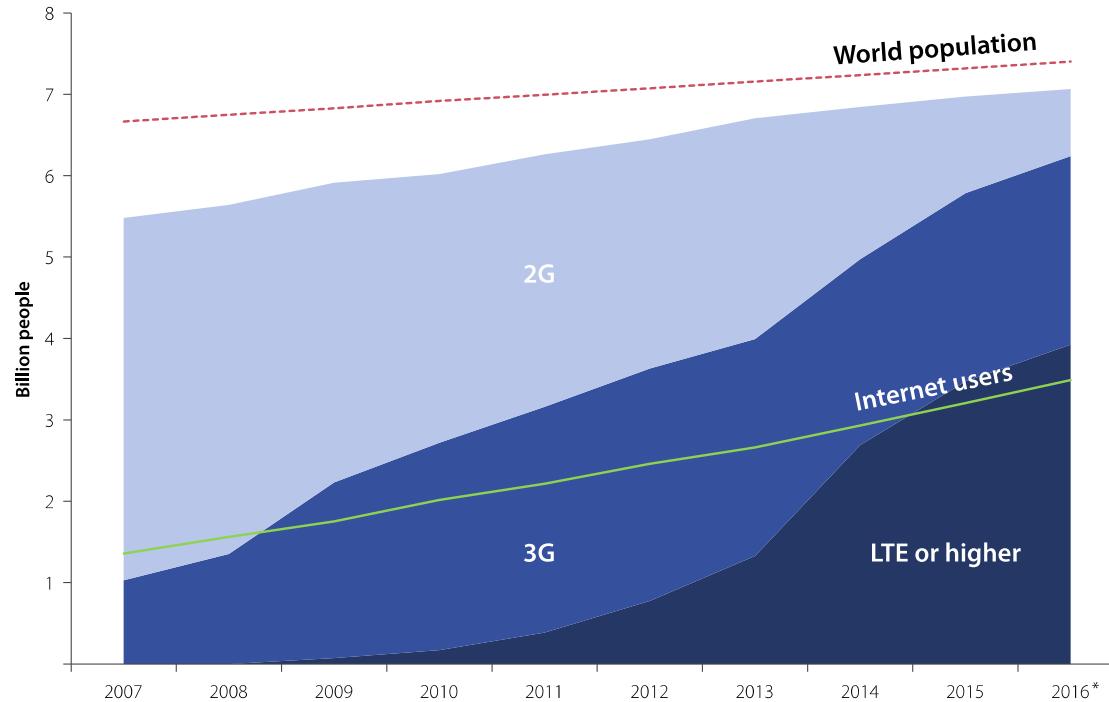
Commits governments to develop national responses:

- **Target 3.4:** By 2030, reduce by one third premature mortality from NCDs
- **Target 3.5:** Strengthen responses to reduce the harmful use of alcohol
- **Target 3.8:** Achieve universal health coverage
- **Target 3.a:** Strengthen the implementation of the WHO Framework Convention on Tobacco Control
- **Target 3.b:** Support research and development of vaccines and medicines for NCDs that primarily affect developing countries
- **Target 3.b:** Provide access to affordable essential medicines and vaccines for NCDs

Mobile and Digital Health Technologies and NCDs



Be He@lthy Be Mobile – Joint WHO/ITU Initiative on mHealth for NCDs



- Supports governments scale-up health interventions for NCDs using mobile technology
- Supports **SDGs** for increasing health coverage, innovation and multisectoral action
- Successfully running for last 4 years

National programs & tools

- mTobaccoCessation
- mDiabetes
- mCervicalCancer
- mCOPD
- mHypertension
- mWellness
- mAgeing

Multisectoral partnership model



Source: ITU.
Note: * Estimates. Mobile network coverage refers to the population that is covered by a mobile network.

Renewed Focus to Reduce Burden of NCD

1. Intensify proven Public Health measures and improve living conditions
2. Innovate health surveillance, prevention and access to health systems through mobile and digital health tools
3. Explore and exploit interrelationship between infectious diseases, chronic inflammation and NCDs
 - One in seven new cancer cases worldwide is caused by infectious agents
 - NCDs predispose for infectious diseases, such as tuberculosis and chronic infections
4. Accelerate translation of ‚actionable‘ research findings in healthcare systems



THANK YOU!